

U

The Future-Ready Library

O

UOW LIBRARY 2021



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

W



PREFACE

The imperative for ongoing, proactive change has been heightened by a number of technology, pedagogical, social, economic driven trends as well as national reforms to higher education policy. The UOW Library is invested in being future-ready, creating and sustaining a nimble, flexible and highly skilled workforce that thrives in a technology rich and enabled learning and research environment.

The development of the *'Future-Ready Library'* roadmap has been influenced and informed by the interactions and professional relationships with researchers, faculty, students and professional services units. An extensive analysis of national and global trends for academic libraries and changing practices in the development and application of technologies was conducted and interpreted within the context of UOW; notably the NMC Horizon Report – Library Edition 2017 which highlights the following themes for future focussed academic libraries:

- Cross institutional collaboration
- The evolving nature of the scholarly record

- Patrons as creators
- Rethinking library spaces
- Digital literacy
- Research data management
- Adapting organisational designs to the future of work
- Embracing the need for radical change; and;

Scenoff's *Mapping the Future of Academic Libraries* which points to a nexus of key trends including

- Datafied scholarship
- Connected learning
- Service-oriented libraries
- Blurred identities
- Intensified contextual pressures

The *Future-Ready Library* roadmap is designed to position the UOW Library to lead and drive deep change and to showcase its unique contribution of skills and professional expertise in the attainment of the UOW vision and strategy.



Margie Jaattil
Director Library Services
February 2018

INTRODUCTION

The UOW Library is invested in being future-ready, redefining its relevance and value through both business and cultural transformation. More than ever before, the library of the future will be characterised by its agility, adaptiveness and flexibility¹. At UOW Library, a deep change initiative has been launched. This is not a standard restructuring exercise, rather the Library is *reframing* itself, challenging deep assumptions, redefining its identity and shaping values to create new thinking and new principles for strategy and action. Deep change will be achieved by being leaderful and adoptive, and by proactively and critically:

- Anticipating and adapting to the rapidly evolving higher education and research environments
- Examining the purpose of the Library
- Identifying the skills, capacity and culture needed to thrive in contemporary library and learning and research organisations.

The journey towards reframing has commenced. The Library Portfolios have been reviewed and reshaped and comprise: Learning and Engagement, Collections and Scholarly Communications, and IT and Infrastructure. We have invested in developing and enhancing the skills of our people – through design thinking and user experience principles, digital literacies,

strategic projects, and from this knowledge we have a strong foundation to inform and progress the Future Ready Library:

- We have initiated the first phase of new roles, e.g. Associate Director Learning and Engagement, Content Strategy Coordinator, Web Content Developer, Web Content Editor, Digital Literacies Coordinator, Digital Content Developer, Makerspace Coordinator and reshaped roles, e.g. Resource Sharing Officers have undertaken new responsibilities contributing to the growing demands in both digitisation and archives project activities.
- We are creating new spaces (physical and virtual) to transform how students and staff experience knowledge and information, e.g. Makerspace, Content Strategy, Digital Learning Co-op.

The people of the Library are well positioned to execute the vision of UOW. This does not mean that the Library works alone – collaboration and partnership is necessary and vital to achieving aspirations for innovation and value creation for the students and staff of the University. Strategic partnerships within and beyond the DVC Academic portfolio will ensure that resources, knowledge and expertise are used to best effect to design and deliver services, resources to contribute to learning and research excellence.

¹ UOW Strategic Plan 2016-2020 + 2019-2020: 'Unlocking higher performance by reducing complexity in our processes and policies and deploying systems that are flexible, available and service focused, and faster agile decision-making, page 12.

OUR PURPOSE

We believe that the UOW community deserves convenient access to resources, expertise, and client-centred environments that inspire them to excel in their academic endeavour.

OUR GOALS

Make it easy to find and use content

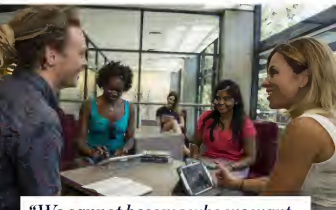
Optimise digitally-enabled learning and service environments

Design and deliver a choice of inspiring learning spaces

Maximise research visibility

OUR GUIDING PRINCIPLE

'Online first' mindset



“We cannot become who we want to be by remaining what we are.”

- Max DePree

OUR COMMITMENT TO TRANSFORMATION

MAKE IT EASY TO FIND AND USE CONTENT

The rapid advances in technologies offer deep-linked, multidimensional experiences with otherwise static content, promoting planned and serendipitous discovery of information and collections within and external to the University Library. The changing nature of the scholarly record (e.g. digital born, digital humanities, non-traditional research outputs) coupled with the proliferation of non-commercial electronic resources, digital collections and materials gives rise to new, creative and innovative ways to engage with information; moving beyond the turn of a page, the view of a screen to virtual, immersive information environments. The rising cost of commercially packaged information is an impetus for seeking where appropriate, alternative models to standard expensive publishing avenues².

Our areas of focus:

- Commitment to an online first mindset in the acquisition, creation and dissemination of content (e.g. available 24/7, device agnostic, rich mineable knowledge-base(s), virtualised relationship management)
- Promotion and policy development for electronic preferred formats, and open advocacy and negotiation for content shifting to e-formats with target audiences being faculty and curriculum developers

- Proactive engagement and partnership with vendors and publishers to develop new models for online delivery of content aligned to the needs of UOW
- Advocacy for fair, affordable access to learning and research resources through the adoption of open education resources (OER), open access models and open scholarship which in turn will shape new principles for collection development and access
- Optimisation of consortia for reciprocal resource sharing as alternative models for discovery and access to content
- Exploration of next generation discovery services for more seamless access to content
- Ongoing digitisation of special collections for learning and research purposes

We will leverage our expertise in the application of metadata, digital preservation standards, licensing, copyright as well as curation and archiving - all essential to prevent loss of content through maladministration, degradation, physical damage or technological obsolescence.

Essential capabilities:

- Digital encoding
- Proficiency in the application of international standards for digitisation and preservation
- Expertise in the application of metadata
- Expertise in intellectual property rights and with other legal and moral rights related to copying, storage, modification of content, and the use of specific digital assets
- Preservation and curation of content, increasingly in digital born format
- Application of linked data connecting all research outputs – data and publications
- Administration of information systems to support more efficient workflows and analytics
- Optimisation of technologies for enhanced publications
- Advanced information management skills to support research and innovation, including identity management

Early milestones:

- Library website content audit and refresh program
- Major changes to full-text linking, including enhancing access to databases
- The UOW Open Access Policy revised to align with changes to research funders' Open Access policies
- The implementation of the system Recollect to improve the user experience in discovering and engaging with unique UOW archival collections.

- Revised Collection Development Policy
- Strategic collaborations to enable digital preservation of significant collections, e.g. Art in Australia (UOW, UNSW, NLA).

Success Indicators:

- Learning resources reading lists – online first policy
- Vendor provision of required digital content
- Discovery and access to open educational content
- Compliance with the Higher Education Support Act – 2003
- By 2020, Curriculum Resources Collection integrated in Main Library Collections
- By 2020, all required and recommended subject readings offered online only
- By 2021, physical collections' footprint reduced by 30%
- Electronic Resource Management (ERM) system optimised to improve management of electronic subscriptions and budget
- Services reviewed for compliance with amendments to Copyright legislation
- Compliance with NHMRC and ARC success indicators



OPTIMISE DIGITALLY-ENABLED LEARNING AND SERVICE ENVIRONMENTS

The changing expectations of graduates to participate in media and technology rich employment settings³ requires new levels of proficiency in digital literacies, trans-literacies and media literacies. Jisc has defined digital literacies broadly as “capabilities which fit an individual for living, learning and working in a digital society.” (<https://www.jisc.ac.uk/guides/developing-digital-literacies>; Jisc 2014). Students and staff of the University are increasingly becoming content creators, with the creative endeavour comes new challenges, including online identity, communication etiquette, and rights and responsibilities. The changing nature of research and scholarship requires new capabilities in the application of technologies such as GIS data, information visualisation, and big data.

Advances in artificial intelligence (AI) applications such as chatbots and location-based services, are shifting the focus of librarians from basic transactional services, while also optimising search engine results to increase student success. Students and staff, regardless of location and, time zones will have access to core service offerings around the clock. The mass customisation of information and learning experiences are enabled through adaptive learning solutions. These types of advances will result in a more efficient and personalised experience for users, building relationship and reputational capital.

Our areas of focus:

- A commitment to an online first mindset in the creation of our learning and service environments
- Active contribution to the success of fully online courses through the integration of content and learning resources; firmly positioning the Library in the online learning eco-system
- The enablement of contemporary life-long learning skills through mastery of digital literacies (students and staff).
- Scope alternatives for the delivery of first year experience program, StartSmart
- The application and integration of adaptive learning experiences and objects, recognising prior learning, knowledge (e.g. core, large first year subjects)
- The improved provision of self-mediated point of need access to learning resources – context sensitive discovery and access, e.g. Digital Learning Co-op, Learning Management System
- Optimisation of knowledge base architecture and machine learning technologies to advance the ongoing automation of services, e.g. AI and Chatbots

3. UoM Strategic Plan 2016-2020, 1.2: enable our graduates to be career-ready, contributing to a world that never changing and to work on complex issues that cross disciplinary boundaries, page 8

Essential capabilities:

- Fluency and skill in the use and application of new and emergent technologies
- Knowledge of contemporary pedagogy with emphasis on student centred learning
- Contemporary education and instructional skills to share knowledge expertise to members of the higher education community
- Capability to participate in digital networks
- Capability to provide advice and, impart education on the creation, production and attribution of scholarly communications in a range of media
- Expertise in intellectual property rights and with other legal and moral rights related to copying, storage, modification of content, and the use of specific digital assets

Early milestones:

- Draft digital literacies framework.
- Staff attainment of Digital Literacies (Phase 1 program)
- Digital Learning Co-op on track for delivery in February 2018
- Collaboration in the delivery of the Technology & Teaching Hub experience
- Online services, e.g. Ask a Librarian, Chat services established – underpinned by refreshed knowledge base

Success Indicators:

- 80% of tier I&II online enquiries fulfilled via automated knowledge base (currently 60%)
- AI prototype initiated in 2018
- Digital Learning Co-op – live in February 2018
- Application of Identity Access Management protocols for context specific experiences, e.g. by cohorts such as alumni

DESIGN AND DELIVER A CHOICE OF INSPIRING LEARNING SPACES

Despite predictions on the decline of libraries as destinations, visitation and occupancy of the UOW Library continues to grow, with demand for space persistently outstripping supply. A new master plan for the Library is an imperative. The ongoing review and consolidation of physical collections is essential to the reimagining of space and its utility. We foresee increasing needs to extend the scope for students to collaborate and co-create in their learning pursuits. As a recognised and vital hub for learning, it is essential that the physical space is rethought and refreshed to meet changing pedagogical models for learning; to foster learning experiences that lead to the development of real-world skills and tangible applications for students.

The definition of learning content needs to be reconsidered to facilitate the shift for sustainable provision of consumables used for the creation of learning and research outputs, e.g. 3D prints, 24/7 access to space is normalised, enabling students to work to their own clock.

The Library's design should inspire students and staff to excel in their academic pursuits. Technology offers an array of options for developing the built environment and to maximise the flexible formats of information and scholarly outputs, such as leveraging information visualisation technologies to showcase scholarly work and

pinpoint connections between research⁴. Faculty and professional services staff benefit from exposure to developments in the application of technologies, and the Teaching & Technology Hub is a showcase for the collaborative possibilities that can be realised by contributing to informal staff learning spaces.

The investment made in digitising University Library collections will return new benefit through the application of VR technology – students and staff will be able to experience information through visual and other sensory aids. The Library will be integral to initiating programs and partnering with university faculty and Professional Services Units to promote active learning and innovation. Defining the role and scope of physical collections in the contemporary Library is essential. To achieve our aspirations for the future-state, a reduction in the physical collections is requisite for space optimisation. It is imperative to consolidate remaining collections to aid convenience in access and to reduce administrative overheads.

The fully online learning strategy offers new ways of defining learning spaces, of what can be delivered in the virtual space. The Library will need to position itself in terms of its contribution to the online learning ecosystem, and the scalability of resources and services beyond the traditional boundaries of the classroom.

4 UOW Strategic Plan 2045-2050, Goal3: deliver...technology-enabled seamless environments, page 10

Our areas of focus

- A commitment to an online first mindset that enables use of technology in developing an inspiring and useful online study and research space
- Collaboration with faculty and Professional Services Units to co-create online and blended learning resources and experiences
- Active contribution to the success of fully online courses through the integration of content and learning resources; firmly positioning the Library in the virtual learning environment
- Full deployment of the Makerspace in a BAU environment
- Scope sustainable models for curriculum-led learning and assessment initiatives through the Makerspace
- Deployment of 24/7 opening hours across Autumn and Spring sessions

Essential competencies:

- Fluency and skill in the use and application of new and emergent technologies
- Contemporary education and instructional skills to share knowledge expertise to members of the higher education community
- Application of linked data
- Administration of repositories to store, promote and preserve the digital assets and outputs of universities
- Proficiency in the application of international standards for digitisation and preservation
- Scripting and computational design

- Expertise in intellectual property rights and with other legal and moral rights related to copying, storage, modification of content, and the use of specific digital assets

Early milestones:

- Launch of the Makerspace (3D printers, flexible displays, media production tools, VR and natural user interfaces) – open 40 hours per week
- Successful 24/7 pilots initiated in stove and exams – sessions I and II 2017
- Informal learning spaces refresh (ground floor Wollongong Campus Library) – Autumn session 2018
- Decommissioning a compactus (864 linear metres of collections; representing 5% of the collection)

Success Indicators:

- 24/7 access for the academic sessional calendar enabled by 2018
- Sustained provision of essential consumables through reshaped budget lines
- Integration of digitised content and collections in the curriculum
- By 2021, physical collections' footprint reduced by 30%
- By 2021, physical collections held in storage on the UOW campus are rehoused (in a cost effective way)
- Revised master plan for Wollongong Campus Library by 2021



MAXIMISE RESEARCH VISIBILITY

The Library in partnership with the Research portfolio plays an integral role for the assurance of the quality and integrity of future scholarship and research. To assure more flexible IP regimes and open dissemination of research results that facilitate translation and commercialisation of research results, further investment in the enhancement of research information systems, institutional repositories, digital storage and a policy environment that champions open access is required. Researchers' online identities across a variety of platforms, comprising persistent unique identifiers, will ensure improved visibility and attribution of research outputs and deliver integration in key research workflows such as manuscript and grant submission.

Increased emphasis is being placed on research data and its administration. GIS data, data visualisation, and big data are expanding how information is collected and shared. These tools are helping libraries preserve and mine their collections while illuminating collaborative opportunities. High quality data must be well managed, particularly to meet compliance requirements to make the outputs of publicly funded research openly accessible², especially as national infrastructure such as the National Research Data Cloud are established. The Library will play a vital role in the imparting of knowledge and skill to the

research community on how to best perform this function.

The role of university libraries has expanded to provide greater support for research and innovation in higher education through:

- provision of repositories to store, promote and preserve the digital assets and outputs of universities
- management and, increasingly, creation of research resources such as datasets and digital collections
- publication, especially electronic publication, of material based on research;
- support for innovation in scholarly expression and communication;
- provision of advice and education on data management policy and planning, metadata, standards and persistent identifiers
- provision of advice and education on measuring and sharing scholarly and research impact,

Our areas of focus:

- A commitment to an online first mindset for scholarly and research communications
- Professional advice and access to resources to contribute to the Excellence in Research Australia & Engagement and Impact assessment initiatives

² [EORF Strategic Plan 2016-2022](#), Goal 1.4 produce high-quality, accessible research organised in strong groups of highly cited and highly relevant research outcomes across the University's nationally acknowledged programs as well as research, page 8

- Positioning publications management within institutional research information systems roadmap, and aligning workflows with multiple research priorities.
- Ensuring increased uptake of ORCID IDs to support data integration, automation, author credit and visibility.
- Enhancing visibility of open UOW journals in recognised research indexes, such as DOAJ
- Advocacy for fair and affordable pricing for core research content
- Review of repository functionality and capability for the changing nature of research collections and outputs

Essential competencies include:

- Advanced information management skills to support research and innovation and the capability to impart skills to others through professional education and instructional services.
- Awareness of contemporary multi-disciplinary and interdisciplinary research methodologies
- Proficiency in the application of international standards for digitisation and preservation
- Expertise in the application of metadata
- Understanding of computational methods and/or digital tools to advance research and pedagogy, e.g. data mining, data visualisation.
- Awareness of emerging descriptors and contemporary definitions of research engagement and impact

Early milestones:

- Open Access Policy (revised 2017)
- Research Data Management Policy and Guidelines
- ORCID rollout (61% of UOW Research Active staff have an ORCID (up from 15%))
- Publication management systems review

Success Indicators:

- 100% Research Active academics with ORCID IDs (increased ORCID integration with UOW Scholars) by 2019
- High visibility of open UOW journals in recognised research indexes, such as DOAJ by 2019
- All eligible outputs provided via the dark archive for the UOW ERA2018 submission
- Publications management systems integrated into research systems roadmap with implementation timeframes.



OUR PEOPLE

The emphasis on technical skills needed as future library and information professionals illustrates the changing role of library and information specialists. The effective knowledge workers of the future will need to be skilled in the 'higher order' skills, notably: emotional intelligence, critical thinking, the ability to engage and to build and sustain relationships, comfort with ambiguity and, co-creation and collaboration. The role of the professional in delivering services in new constructs and helping others to interpret and navigate the changing higher education landscape will be further heightened. We foresee the need for new and enhanced skillsets, with an emphasis on advanced information management capabilities, capacity to refresh technological skills and relationship management in an ever-increasing globalised, online environment.

An agile and flexible workforce, therefore, will be the hallmark of the effective, innovative university library. Existing assessments reveal that the people are well positioned to meet the demands of a future ready library. The Workforce Profile Inventory will play a critical role in prioritising ongoing professional development and recruitment initiatives⁶.

Our areas of focus:

- A commitment to an online first mindset for the development of skills, knowledge and aptitude
- Cultural transformation to underpin the new ways of working
- Scaffolded digital dexterity capabilities as core skills for all staff
- Flexible approaches to assigning and delivering the work; clear expectations and assessment of accountabilities
- Leadership effectiveness

Early milestones:

- Disestablishment of some functions
- Redeployment of staff to areas of strategic focus, e.g. Makerspace, Content Strategy, Digital Literacies
- Talent profile inventory established
- Phase 1 digital literacies program completion

Success Indicators:

- A flexible staff profile aligned to changing strategy and innovation priorities
- VOICE Survey outcomes



CONCLUSION

The Reframing initiative is not a one-off exercise. Reframing has been an instrument to initiate and facilitate a rolling cycle of renewal for the UOW Library. The rapidity of change and increasing ambiguity and complexity in the higher education sector means that our purpose is constantly challenged and scrutinised for value, relevance and resilience. The Future-Ready Library values new and creative thinking and the application of new principles for strategy and action. This Future-Ready

Library report makes clear our approach to identifying and seizing opportunities to optimise the unique contribution made by the people of the Library through their professional expertise, and delivery of exceptional and innovative services and resources. This report is a roadmap our anticipation of and adaption to the rapidly evolving higher education and research environments.



UNIVERSITY OF WOLLONGONG LIBRARY

Building 16, Northfields Ave, Wollongong
(02) 4221 3545

library.uow.edu.au
facebook.com/UOWLibrary
twitter.com/UOW_Library
[#uowlibrary](https://www.instagram.com/uowlibrary)

Additional photography:
MPA



UNIVERSITY
OF WOLLONGONG
AUSTRALIA